

No. 2024-1508

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

APPLE INC.,

Appellant,

v.

LBT IP I LLC,

Appellee.

Appeal from the United States Patent and Trademark Office,
Patent Trial and Appeal Board, in No. IPR2020-01189

REPLY BRIEF FOR APPELLANT APPLE INC.

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CERTIFICATE OF INTEREST

Counsel for Appellant Apple Inc. certifies the following:

1. The full name of every entity represented by me is:

Apple Inc.
2. The parties named in the caption are the real parties in interest.
3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of Appellant are as follows:

None
4. The names of all law firms and the partners or associates that appeared for Appellee in the trial court or are expected to appear in this court (and who have not or will not enter an appearance in this case) are:

ERISE IP, P.A.: Jennifer C. Bailey, Adam P. Seitz, Robin Snader
5. The following cases are related to and/or may be affected by the outcome of this appeal:

LBT IP I LLC v. Apple Inc., No. 19-cv-1245 (D. Del.)

LBT IP I LLC v. Apple Inc., Nos. 22-1613, 22-1614, 22-1615, 22-1616, 22-1617 (Fed. Cir.)
6. The following parties were involved in the above-listed cases:

Apple Inc.

LBT IP I LLC
7. The following law firms, partners, and associates were involved in the above-listed related cases:

Erise IP, P.A.: Clifford T. Brazen, Abran J. Kean

Potter Anderson & Corroon, LLP: David E. Moore, Bindu A. Palapura, Tracey E. Timlin, Stephanie E. O'Byrne

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Young Conaway Stargatt & Taylor, LLP: Karen L. Pascale, Robert M. Vrana

8. There are no organizational victims or bankruptcy case debtors or trustees in this appeal.

Dated: October 3, 2024

/s/ Jaysen S. Chung

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INTRODUCTION

LBT's attempts to defend the Board's "threshold values" construction find no support in the claims or elsewhere in the intrinsic record.

The claims recite a "power level comprising a multitude of threshold values," and LBT concedes the specification describes multiple types of "power level[s]"—including the "power level of [a] receive[d] communication signal" (GPS signal). Dkt. 21 ("LBTBr.") 3-4, 7. LBT, however, insists that "threshold values" must be limited to "battery power level" values because the claims recite a "battery power level monitor" to "measure" or "adjust" a "power level." LBTBr. 19-22. But the patent nowhere limits the measured or adjusted power level to a battery power level. Instead, the claims separately recite the terms "battery power level" and "power level." The claim language therefore indicates the former is a narrower subset of the latter, which is consistent with the specification. Thus, "power level comprising a multitude of threshold values" can include types of power levels other than battery power levels, such as the signal power levels indisputably disclosed in the specification.

In addition, LBT fails to resolve the error in the Board's reasoning that signal levels must be excluded from the scope of "power level comprising a multitude of threshold values" because "signal levels" is a separately recited term. Specifically, the Board's reasoning leads to the internally inconsistent result that the "estimated

charge level,” which is also a separately recited term, likewise must be excluded from that scope—even though the patent repeatedly treats “charge levels” synonymously with “battery power levels.” Dkt. 20 (“AppleBr.”) 29-31; Appx16. Although LBT does not dispute that “estimated charge level[s]” are a “distinct” claim limitation (and that the specification treats “battery charge level[s]” “interchangeably” with battery power levels), it contends the word “estimated” saves the Board’s construction. LBTBr. 17, 23. But the word “estimated” does not save the Board’s flawed logic because the specification also treats “estimated charge level” synonymously with “battery charge level” and “battery level.” Appx54 (13:10-12); *id.* (13:15-17).

Furthermore, LBT agrees there are “Two Embodiments in The Specification Describing ‘Threshold Values’”—one corresponding to battery power levels and another that corresponds to signal power levels. LBTBr. 10; *id.* at 11 (“one type of threshold value may correspond to a signal level”). LBT also agrees that, in both embodiments, these threshold values are “user-adjustable” and can be used to “conserve[] battery”—just like the recited “threshold values.” *Id.* at 17-18, 29. Nevertheless, LBT identifies superficially different language used in the specification to describe the two embodiments, and contends the difference is “clear evidence” that the patentee intended to exclude “signal levels” from the term “a multitude of threshold values.” *Id.* at 26-30. To the contrary, the “[v]aried use of a

disputed term in the written description demonstrates the breadth of the term rather than providing a limited definition.” *Johnson Worldwide Associates, Inc. v. Zebco Corp.*, 175 F.3d 985, 991 (Fed. Cir. 1999). Indeed, the specification contemplates that both “threshold value” embodiments are within the scope of the claims. Both describe threshold values as user-adjustable values that achieve the desired tradeoff between battery life and location update rate by intermittently adjusting the power level applied to location tracking circuitry.

Finally, as to the Board’s faulty reliance on prosecution history disclaimer, LBT’s response is merely an attempt to shift the burden to Apple to find a clear and unmistakable statement in the prosecution history supporting Apple’s construction. That is not the law. Instead, as the party asserting prosecution history disclaimer, it is *LBT’s* burden to identify a clear and unmistakable statement in the prosecution history limiting the scope of “threshold values.”

Thus, the Board’s decision should be reversed, and the case should be remanded for the Board to consider whether the claims would have been obvious under the correct construction of “threshold values” that includes values associated with signal levels.

ARGUMENT

I. The Claim Language Read in View of the Specification Does Not Support the Board’s Narrow Interpretation of “Threshold Values”

LBT concedes the patent specification describes multiple types of power levels—including the “power level of [a] receive[d] communication signal.” LBTBr. 7. Nevertheless, LBT contends that the claim language supports the Board’s construction limiting the term “power level comprising a multitude of threshold values” to threshold values associated only with battery power levels and excluding values associated with signal levels. *Id.* at 19-22; Appx16-19. LBT’s assertions should be rejected for the reasons discussed below.

1. LBT argues that because claim 8 recites a “battery power level monitor” that “measures a power level of the charging unit and adjusts a power level applied to location tracking circuitry,” the term “power level comprising a multitude of threshold values” must be limited *only* to threshold values associated with battery power levels. LBTBr. 19-22 (citing Appx55 (16:53-61)). LBT’s argument fails in several respects.

As an initial matter, LBT relies on *Wi-Lan, Inc. v. Apple Inc.*, 811 F.3d 455 (Fed. Cir. 2016), to argue that “the definite article ‘the’ t[ies] ‘power level comprising a multitude of threshold values’ back to ‘a power level applied to location tracking circuitry’ as adjusted by ‘the battery power level monitor.’” LBTBr. 22 (citing 811 F.3d at 462). But that case stands for the unremarkable

proposition that the definite article “the” before a claim term can be used to “refer[] back” to the “*same term* recited earlier in the claim.” *Wi-Lan*, 811 F.3d at 459-62 (emphasis added). Apple does not dispute that “the power level comprising a multitude of threshold values” may refer to one or both of the earlier-recited “power levels”—the one that is “measured” and the other that is “adjusted.” Rather, Apple disagrees that using a definite article refers “power level” back to “battery power level monitor”; those terms are not the “same,”¹ and there is nothing in the intrinsic record supporting such a conclusion. *Cf. id.*

In any event, LBT does not dispute the fundamental claim construction principles that control the inquiry here. *See, e.g.*, LBTBr. 21. In particular, claim language is entitled to a “broader reading” if it “places no constraint” on the scope of a term. *Google LLC v. EcoFactor, Inc.*, 92 F.4th 1049, 1058 (Fed. Cir. 2024). Additionally, where a claim uses a broader version of a term (*e.g.*, “power level”) and a narrower version of the term appears elsewhere in the claims or specification (*e.g.*, “battery power level” or “signal power level”), the claim’s use of the broader version supports a broader construction, since it is apparent that the applicant knew how to use the narrower version if that was what they intended. *Cordis Corp. v. Medtronic Ave, Inc.*, 511 F.3d 1157, 1174 (Fed. Cir. 2008) (“The written description

¹ Indeed, “power level” is used as an adjective in “battery power level monitor” and as a noun in “the power level comprising a multitude of threshold values,” confirming they are not the same term.

uses the more specific phrase ‘complete slots’ when distinguishing complete slots from half slots, and thus supports the inference that the term ‘slots,’ ... refers to both complete slots and half slots.”).

Here, the ’774 patent uses the term “power level” broadly while also referring to specific types of power levels, including “battery power level[s]” and “signal power level[s].” *E.g.*, Appx54 (13:44-51) (“measures a power level (e.g., battery power level 406)”); *id.* (13:52-56) (“adjusts a power level (e.g. battery power level 406)”); Appx51 (7:22-23) (“a signal detecting circuitry 115 detects and measures signal power level”); *id.* (7:23-25) (“the signal processing circuitry 104 processes and measures signal power level”). Thus, the plain language of “power level comprising a multitude of threshold values,” read in view of the specification, means that the broader term (“power level”) controls and “threshold values” therefore includes values corresponding to *both* types of power levels. *Cordis*, 511 F.3d at 1173-74 (holding that the claim term “slots” encompassed “half-slots” and “complete slots,” where the specification referred to both types of slots); *Promptu Sys. Corp. v. Comcast Corp.*, 92 F.4th 1372, 1382 (Fed. Cir. 2024) (“The absence of the ‘centralized’ modifier in the claims, in turn, means that the claimed ‘wireline node’ must be broader in some way than the ‘centralized wireline node’ defined in the specification.”); *Evolusion Concepts, Inc. v. HOC Events, Inc.*, 22 F.4th 1361, 1366 (Fed. Cir. 2022) (holding that the “generic term” “magazine catch bar” did not

exclude specific types of magazine catch bars where “[n]othing in the language of [the] claims” limited the term).

Nevertheless, LBT argues that because the “same specific term (‘power level’) is used in both the claims and the specification” to refer to Figure 4’s “multitude of threshold values,” “power level” *must* be limited to battery power levels. LBTBr. 21. But LBT then admits that “power level” is *not* actually a “specific term” used to refer only to battery power levels and that, instead, the “specification discloses *both a signal power level and a battery power level.*” *Id.* at 22 (emphasis added); *id.* at 3 (referring to the specification’s disclosure of “power level” of a “receive[d] communication signal”). Thus, under LBT’s own characterization of *Promptu* and *Cordis*, “power level” should include both signal and battery power levels. *Id.* at 21 (characterizing the case law as “involv[ing] a broader term recited in a claim and a narrower term defined in the specification”).²

² LBT suggests Apple’s argument that a “battery power level” is distinct from a “power level” is an “improperly raised new argument.” LBTBr. 20-21. That is wrong. Before the Board, Apple clearly distinguished between the various “power levels” discussed in the specification. *E.g.*, Appx697 (quoting the specification’s reference to “a power level of the receive communication signal”) (emphasis in original); Appx700 (referring to “battery power levels”); Appx708 (“[T]he ‘multitude of threshold values’ may include the power level of a battery, but the claim is not limited to only those power levels given its use of the term ‘comprising.’”) (emphasis in original); *id.* (arguing that threshold values include both the “power of a battery (e.g., the charging unit)” and the “power level that is applied to the GPS” based on the “broad, plain language” in claim 8).

Furthermore, LBT dismisses as “irrelevant” the specification passages referring to a “signal power level,” as well as the open-ended term “comprising” in the phrase “power level comprising a multitude of threshold values.” LBTBr. 21-22. The basis for LBT’s argument, however, is its same assertion that the phrase “power level comprising a multitude of threshold values” “refers back” to *only* the power level measured or adjusted by the “battery power level monitor” and thus is limited to *battery* power levels. *Id.* at 9-10, 21-22. Again, nothing in the specification or elsewhere in the intrinsic record suggests the “battery power level monitor” must measure or adjust *only* battery power levels—let alone that the power levels must be comprised of threshold values corresponding only to battery power levels. The term “battery power level monitor” appears only in the claims, without any requirement that the monitor measure or adjust *only* battery power levels at the exclusion of the signal power levels described in the specification. Appx55-56 (claims 8, 15).

In fact, as Apple has explained, the specification’s discussion of adjusting the power applied to location tracking circuitry based on signal power levels directly contradicts LBT’s assertion and the Board’s conclusion. AppleBr. 37-42. Specifically, Figure 3 and its accompanying disclosures recognize that the “location tracking circuitry” can be “activated” if the “power level” of a “receive[d] communication signal” is “of sufficient signal strength.” Appx43 (Fig. 3); Appx52

(10:38-67). In those situations, the “power level” applied to the location tracking circuitry is adjusted based on the threshold value of, *e.g.*, a “low signal level.” Appx43 (Fig. 3); Appx52 (10:38-52); Appx51 (7:50-8:15). The claim language, particularly when considered in view of the specification, therefore encompasses threshold values associated with signal power levels.

Thus, the Court should reverse the Board’s decision and reject its construction of “threshold values” given the absence of any support in the claim language or elsewhere in the intrinsic record. *Uniloc 2017 LLC v. Sling TV, L.L.C.*, No. 23-1156, 2024 WL 4038034, at *2 (Fed. Cir. Sept. 4, 2024) (non-precedential) (holding that the claim term “presentation data” did not exclude “metadata” where “nothing in the claim language, specification, or prosecution history” supported “import[ing] a negative claim limitation into the claim that cannot be found in the claim language itself”) (citing *Linear Tech. Corp. v. ITC*, 566 F.3d 1049, 1060 (Fed. Cir. 2009)).

2. LBT also fails to resolve the fundamental problem with the Board’s conclusion that threshold values associated with signal levels are excluded from the scope of “power level comprising a multitude of threshold values” because “signal levels” are separately recited. Appx16 (citing *Chicago Bd. Options Exch., Inc. v. Int’l Sec. Exch.*, 677 F.3d 1361, 1369 (Fed. Cir. 2012)). Specifically, as Apple has explained (AppleBr. 29-31), applying the Board’s reasoning leads to the following internally inconsistent result: excluding the separately recited “estimated charge

level of the charging unit” from the scope of “multitude of threshold values,” even though the patent treats “charge level” synonymously with “battery power level 406.” *E.g.*, Appx16-17; Appx53 (11:11-15) (“battery charge level 406”); Appx54 (13:13-18); (“estimate charge level (e.g., battery level 406)”; Appx53 (11:44-53) (“battery charge level 406” is “responsive to value 419” determined by a user).

LBT offers no rebuttal to Apple’s argument that the specification treats “battery power level 406,” “battery charge level 406,” and “battery level” “interchangeably.” *See* LBTBr. 23. In fact, LBT agrees with Apple that claim 8 “separately recites ‘estimated charge level of the charging unit,’” and that this limitation is “distinct” from the “power level as recited in the claims.” *Id.* at 17. Nevertheless, LBT contends the word “estimated” preceding “charge level” somehow saves the Board’s construction because, according to LBT, an “estimated charge level” “as recited in claim 8” is different from a battery charge level, and therefore not “encompassed” within the “Board’s construction of ‘a multitude of threshold values.’” *Id.* at 23-24.

There is no support anywhere in the intrinsic record for LBT’s assertion. To the contrary, the patent repeatedly refers to the same battery power level denoted by 406 as an “estimated charge level.” *E.g.*, Appx54 (13:6-12) (“responsive to estimated charge level of charging unit (e.g., battery charge level 406)”; *id.* (13:13-17) (“indicates estimate charge level (e.g. battery level 406)”; *id.* (13:65-67)

(“estimated charge level (e.g., battery charge level 406)”). Thus, the word “estimated” does not save the Board’s flawed reasoning that excludes “signal levels” but not “charge levels” from the scope of “threshold values.” Far from being “irrelevant” (LBTBr. 23), the fact that the patent contemplates that the separately recited “estimated charge levels” are within the scope of “threshold values” indicates “signal levels” also are not excluded from that scope merely because they are separately recited.³ The Board’s construction, which is internally inconsistent with its own reasoning, therefore was erroneous.

3. LBT contends the word “intermittently” in claim 8 must mean the purpose of the recited “threshold values” is to activate the location tracking circuitry “according to a schedule” (as in Figure 4, the battery level embodiment, referring to a “multitude of threshold values”), rather than a “trigger” (as in Figure 3, the signal

³ LBT suggests Apple’s “charge level” argument is “new.” LBTBr. 23. Apple’s argument, however, is a direct response to the Board’s flawed reasoning that “signal level” cannot be encompassed by “threshold value” because they are separately recited claim limitations (an argument LBT itself did not make in its claim construction brief and therefore not one that Apple responded to in its own briefing). Furthermore, Apple’s argument relies only on intrinsic evidence, is entirely consistent with its positions before the Board, and directly responds to the Board’s flawed construction. It therefore is not forfeited. *E.g., Seabed Geosolutions (US) Inc. v. Magseis FF LLC*, 8 F.4th 1285, 1289-90 (Fed. Cir. 2021) (holding that “[t]he doctrine of waiver does not preclude a party from supporting its original claim construction with new citations to intrinsic evidence of record”); *Univ. of S. Fla. Rsch. Found., Inc. v. Fujifilm Med. Sys. U.S.A., Inc.*, 19 F.4th 1315, 1324 (Fed. Cir. 2021) (holding there was no forfeiture where the “district court *sua sponte* raised th[e] issue” in its decision).

level embodiment, referring to a single “threshold value”). LBTBr. 25-27; *id.* at 10-12 (characterizing the signal level embodiment of “threshold value” as the “GPS signal strength trigger method correspond[ing] to Fig. 3”). LBT argues that, accordingly, the Board’s construction is correct because only the battery power level embodiment operates according to that purpose. *Id.* at 24-25.

Yet again, there is no support in the intrinsic record for LBT’s assertion. Nothing in the claim language or specification suggests the word “intermittently” mandates that the activation of the location tracking circuitry occur *only* according to a specific schedule. The specification does not require that the “multitude of threshold values” in Figure 4 *must* operate according to a “schedule”; that is merely “one variant” of Figure 4. Appx 54 (13:31-43). Indeed, the word “intermittently” appears only twice in the body of the specification, and neither occurrence suggests a “schedule” requirement either. Appx48 (2:30-45) (“[C]onventional inertial navigation systems **intermittently** reset to zero inertial tracking velocity, for instance, by stopping the inertial navigation system”) (emphasis added); Appx54 (13:58-67) (“[T]he present invention has the capability of power level (e.g., battery power level 406) adjustments include multitude of threshold values ... that is determined by user or system administrator to **intermittently** activate or deactivate location tracking circuitry”) (emphasis added).

Even if the word “intermittently” did require a specific schedule, the specification contemplates that, just like the battery level embodiment, the signal power level embodiment can activate the location tracking circuitry according to a schedule. The specification describes checking the strength of “receive[d] communication signal[s]” at “selected time intervals,” to determine whether the signals are “of sufficient signal strength” to place the accelerometer on standby and activate the GPS for location tracking. *E.g.*, Appx52 (10:38-58) (“location tracking circuitry” described in Fig. 3 can be “activated at selected time intervals”); Appx51 (7:59-8:3) (threshold values related to signal levels can place the accelerometer on “standby mode” for “a specified time period”). There is no basis in the claims or specification for treating the activation of location tracking circuitry at “selected time intervals” (as in Figure 3) differently from the “intermittent” activation of location tracking circuitry in Figure 4. *Compare* Appx51 (7:59-8:3), Appx54 (10:38-67), Appx43 (Fig. 3), *with* Appx54 (13:52-67), Appx44 (Fig. 4).

In any event, the specification confirms that the purpose of the “threshold values” is not so narrow as LBT contends. The specification instead explains that the purpose of the user-adjustable “threshold values” is to help “achieve a desired user defined battery operating environment, e.g., obtain optimal battery life, obtain optimal update rate, tradeoffs between them.” Appx53 (11:58-63); Appx49 (4:43-50) (referring to the “user viewable tradeoffs between the estimated charge unit life

and charge unit update rate”); *see also* AppleBr. 31, 40-42. Notably, even LBT agrees that the “‘crux of the invention’ is that a user may select from a ‘multitude of threshold values’ ... ‘to achieve a desired user defined battery operating environment.’” LBTBr. 29 (citing *Seabed Geosolutions*, 8 F.4th at 1288). The specification further explains that the user can use either signal levels or battery levels to achieve this desired battery operating environment. *Compare* Appx51 (7:55-65) (“a first signal level, e.g., a low signal level or threshold value” may be “specified by, for instance a user or system administrator” to activate the accelerometer) *and* Appx51 (8:4-16) (location tracking circuitry “may be placed in a sleep or standby mode to conserve a battery level of the battery” depending on whether “a receive communication signal is above a first signal level”), *with* Appx54 (13:52-67) (invention “has the capability of power level (e.g., battery power level 406) adjustments” using a “multitude of threshold values” “determined by [a] user or system administrator” “to conserve power of the power charging unit”).

Indeed, the two embodiments are related. The specification repeatedly states that (1) GPS signal level affects battery life and (2) the desired location update frequency affects the battery life. Appx48-49 (2:62-3:9) (a “weak GPS signal” causes the GPS transceiver to “deplet[e] battery power”); Appx55 (15:17-21) (referring to the “tradeoff” between the “estimated charge life” and the “update rate ... of location coordinate information”); Appx51-52 (8:67-9:17) (“the present

invention conserves battery power by placing on standby, low power mode, or disabling entirely GPS signal acquisition circuitry”). Thus, striking the desired tradeoff between battery life and more accurate location updates can be accomplished by adjusting “threshold values” corresponding to either the GPS signal level or the battery power level. *Compare* Appx51 (7:50-8:3) (users can “con[s]er[v]e a battery level of the battery” by “specify[ing]” a “first signal level, e.g., a low signal level or **threshold value**” that “activates the accelerometer”) (emphasis added), *with* Appx54 (13:52-67) (user can “determine[]” “**threshold values**” associated with “battery power level 406” that serve to “intermittently activate or deactivate location tracking circuitry” “to conserve power of the power charging unit”) (emphasis added).

Accordingly, the plain language of the claims, particularly when read in view of the specification, does not limit “threshold value” to a specific embodiment (at the exclusion of the other) and encompasses values associated with signal levels. *Google*, 92 F.4th at 1058 (holding that claims are entitled to a “broader reading” absent “redefinition or disavowal” of claim scope).

II. There Is No “Clear Evidence” Excluding the “Signal Level” Embodiment From the Definition of “Threshold Values”

LBT does not dispute that the specification contains “[t]wo [e]mbodiments” of “threshold values” (Appx51 (7:50-8:3); Appx54 (13:52-67))—one that corresponds to threshold values associated with battery power levels (as shown in

Figure 4) and another that corresponds to threshold values associated with signal power levels (as shown in Figure 3). LBTBr. 10 (“The Two Embodiments in the Specification Describing ‘Threshold Values’”); *id.* at 11 (“one type of threshold value may correspond to a signal level”). LBT also agrees that “both embodiments may employ a user-adjustable value” (*id.* at 17) and acknowledges that “both uses might result in conserved battery usage” (*id.* at 29). Nor could LBT dispute those facts, as both embodiments explain these user-adjustable values are used to determine how often the device seeks updated location information at the expense of battery life. Appx51 (7:50-8:3); Appx54 (13:52-67); *see also* Appx43 (Fig. 3); Appx52 (10:38-67); Appx44 (Fig. 4).

Nonetheless, LBT defends the Board’s arbitrary exclusion of the signal power level embodiment from the “threshold values” construction, arguing there is “clear evidence of the intent to claim a single embodiment at the exclusion of other unrelated disclosed embodiments.” LBTBr. 26. LBT’s arguments fail for the reasons discussed below.

1. LBT block quotes the battery power level embodiment of a “multitude of threshold values” at column 13 next to the language of claim 8 of the ’774 patent and insists that the two passages’ use of “almost identical language” is “clear evidence” that the signal level embodiment must be excluded from the definition of threshold values. LBTBr. 26-27. But LBT ignores that, as Apple has explained

(AppleBr. 40), the language in column 7 describing the signal level embodiment also closely tracks the language of claim 8.

For example, both claim 8 and the signal level embodiment describe “threshold values” as values selected by “a user or system administrator.” *Compare* Appx51 (7:55-59) (signal level threshold values may be “specified by, for instance, a user or system administrator”), *with* Appx55 (16:53-61) (threshold values are “determined by a user or system administrator”). In addition, as discussed above, both the signal level embodiment and the claimed threshold values share the same purpose of allowing a user to adjust the values to achieve the desired tradeoff between location updates and battery conservation. *Compare* Appx51 (7:55-8:3) (signal level embodiment may be used to “converse [sic] a battery level of the battery”), *with* Appx55 (16:53-61) (threshold values serve to “conserve power of the charging unit”); *supra* pp. 11-15. Furthermore, how the signal level embodiment accomplishes that goal mirrors how the threshold values in claim 8 conserve battery level (activating or deactivating the location tracking circuitry in response to the threshold value). *Compare* Appx51 (7:55-8:3) (“electrical circuitry associated with GPS signal acquisition ... may be, for instance placed on standby or in a sleep mode” when the transceiver receives a “low signal level or threshold value”), *with* Appx55 (16:53-61) (“threshold values” “intermittently activate or deactivate the location tracking circuitry”).

That the description of the signal level embodiment may use language that less closely mirrors the claim language as compared to the description of the battery power level embodiment does not mean the two embodiments operate in a “fundamentally different” manner. LBTBr. 27-28. Instead, as this Court has held, the “[v]aried use of a disputed term in the written description demonstrates the breadth of the term rather than providing a limited definition.” *Johnson Worldwide Associates*, 175 F.3d at 991; *see also Anchor Wall Systems, Inc. v. Rockwood Retaining Walls, Inc.*, 340 F.3d 1298, 1308 (Fed. Cir. 2003) (the “many uses of the term” “protrusion” in the specification indicated that “protrusion” as used in the claims could “encompass[] protrusions of any number of shapes”). Here, the specification’s “varied” descriptions of “threshold values” as between the two embodiments indicate the “breadth” of the term, and there is no basis to conclude any superficial differences between them requires a “limited definition” of the term.

2. LBT also contends the use of the singular form of “threshold value” with respect to the signal level embodiment indicates that it operates in a “fundamentally different manner” from the “multitude of threshold values” used in the battery power level embodiment. LBTBr. 28. Specifically, LBT argues that “[a] single threshold value” functions as a “simple trigger” to “alternate between two components” (the accelerometer and the location tracking circuitry), whereas a

“multitude of threshold values” “correspond[] to power level adjustments used to schedule when a single component is repeatedly turned on and off.” LBTBr. 28.⁴

As discussed above, however, LBT’s “trigger” versus “schedule” view of the two embodiments does not square with the claim language or the specification. *Supra* pp. 11-15. Nor does the mere use of the singular versus plural form of “threshold value” limit the scope of the claims to include one embodiment (*i.e.*, the battery power level embodiment) at the exclusion of another (*i.e.*, the signal power level embodiment). *Evolusion*, 22 F.4th at 1365 (explaining that terms should be interpreted “consistently throughout the patent”) (quoting *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005)). Thus, this superficial difference between the descriptions of the two embodiments does not come close to constituting “clear evidence” that the signal level embodiment is “fundamentally different” from the

⁴ In the Background section of its brief, LBT relies on a passage that refers to Figures 1-2 and 4-6 as “exemplary embodiments of the electronic tracking device” and suggests without explanation that there is meaning behind the fact this disclosure “omits Fig. 3.” LBTBr. 11 (quoting Appx50 (6:30-32)). The only meaning behind this omission, however, is that the quoted figures illustrate the overall system, while Figures 3 and 7 show “flow diagram[s]” of the system. Appx50 (4:62-5:16). These two types of illustrations are related, and both types are embodiments of the alleged claimed invention. Appx52 (10:38-52) (describing Figure 3 as a “flow chart 300 illustrat[ing] battery conservation for electronic tracking device 100, as described in FIGS. 1, 2, in accordance with one **embodiment** of the present invention”) (emphasis added); Appx54 (14:59-63) (describing Figure 7 as a “flow chart 700 illustrat[ing] user definable adjustable conservation power level monitor for electronic tracking device 402 as described in FIGS. 4, 5, and 6 in accordance with one **embodiment** of the present invention”) (emphasis added).

battery level embodiment and disclaimed from the scope of “threshold values.” LBTBr. 28; *cf. Apple Inc. v. Corephotonics, Ltd.*, 81 F.4th 1353, 1359 (Fed. Cir. 2023) (holding that “absent clear evidence to the contrary,” claims should not be interpreted “in a way that would omit a disclosed embodiment”).

3. Like the Board, LBT relies on *Pacing Technologies, LLC v. Garmin International Inc.* to assert that “the plain language of the claims and the specification both provide a ‘clear and unmistakable disavowal’ of any alternative construction” of threshold values that includes signal levels. LBTBr. 29 (quoting 778 F.3d 1021, 1026 (Fed. Cir. 2015)); *see also* Appx19 (n.10).

Here, however, there was no such “clear and unmistakable disavowal.” In *Pacing Technologies*, the claims were directed to a system for helping a user maintain a particular pace during an exercise routine using a playback device. 778 F.3d at 1022-23. This Court held that the phrase “repetitive motion pacing system for pacing a user” was limited to a system that “pace[s] the user by playing back the pace information using a tempo,” despite acknowledging that the “plain and ordinary” meaning of the phrase encompassed broader means for pacing a user. *Id.* at 1024. The Court reasoned that the narrower construction was dictated by “a clear and unmistakable statement of disavowal or disclaimer” in the specification because the patent described nineteen “objects and features” of the invention and then stated that all nineteen “are accomplished, as embodied and fully described herein, by a

repetitive motion pacing system” “adapted to producing the sensible tempo.” *Id.* at 1025. “With these words,” the Court explained, the patentee “alert[ed] the reader that the invention accomplishes *all* of its objects and features” by using a tempo and therefore “unmistakably limit[ed]” the claims to such an embodiment. *Id.* (emphasis in original).

In contrast, neither use of “threshold value” in the ’774 patent specification is accompanied by a statement that “unmistakably limits” the claims to one of the two embodiments. *Compare id.*, with Appx51 (7:50-8:3) (“**In one embodiment**, the accelerometer activates” upon detection of, *e.g.*, “a low signal level or threshold value”) (emphasis added); Appx54 (13:52-67) (“the present invention **has the capability** of power level (*e.g.* battery power level 406) adjustments include multitude of threshold values”) (emphasis added). Indeed, in *Pacing Technologies*, this Court cautioned that the standard for finding disclaimer is “exacting” and thus disclaimer occurs only when the patent includes a clear statement excluding an embodiment that is otherwise within the scope of the claims, such as when the patentee “repeatedly disparage[s]” such an embodiment, states that a particular feature that is absent from the contested embodiment is “important” to the invention, or states that the “present invention is” limited to a particular embodiment. *Pacing Techs.*, 778 F.3d at 1024-25 (collecting cases). Here, the ’774 patent makes no

disavowal of the signal level embodiment at all, and LBT points to none. LBTBr. 28-30.

III. LBT Fails to Identify a Clear and Unmistakable Disclaimer in the Prosecution History

As Apple has explained, the Board lacked support for its conclusion that the prosecution history indicates “threshold values” excludes signal levels. *See* AppleBr. 42-46; Appx21. Specifically, the Board relied only on two claims during prosecution—one that used the term “threshold values” and another that used the term “signal level[s]”—as evidence that threshold values could not encompass signal levels. Appx20-21. That conclusion was erroneous, particularly because the claims and specification contemplate a broader interpretation of “threshold values” that includes a “signal level” embodiment, and neither the applicant nor the Patent Office made any statements disclaiming the breadth of the term “threshold values.” AppleBr. 42-46; *see also* Appx997-1000; Appx1016-1026.

LBT does not dispute that “only a ‘clear and unmistakable’ disclaimer or surrender of claim scope can overcome a contrary construction dictated by the specification or claim language.” LBTBr. 30 (citing AppleBr. 42) (quoting *Comcast IP Holdings I LLC v. Sprint Comms. Co., L.P.*, 850 F.3d 1302, 1313 (Fed. Cir. 2017)). LBT also has no response to Apple’s argument that (i) submitting two claims during prosecution that differ from one another and (ii) later amending those claims without comment does not “by itself evince a clear intention by the applicant” to

exclude the signal level embodiment from “threshold values.” *Compare* AppleBr. 45-46 (citing *Kopykake Enterprises, Inc. v. Lucks Co.*, 264 F.3d 1377, 1382 (Fed. Cir. 2001) and *Baxalta Inc. v. Genentech Inc.*, 972 F.3d 1341, 1348 (Fed. Cir. 2020)), *with* LBTBr. 30-31.

Instead, LBT insists that the prosecution history supports the Board’s construction because *Apple* did not “point to any disclaimer” establishing that the “‘power level comprising a multitude of threshold values’ should not be limited to ‘a power level applied to location tracking circuitry,’ as adjusted by ‘the battery power level monitor.’” LBTBr. 30-31; *see also id.* at 31 (accusing Apple of “fail[ing] to provide any potential disclaimer” supporting a broader interpretation of “threshold values”). That is not the law of prosecution history disclaimer. Apple is not required to “point to” (LBTBr. 30) affirmative statements in the prosecution history supporting a broader construction of “threshold values” where, as here, the patent contemplates such a construction. *Comcast*, 850 F.3d at 1313. Instead, it is LBT and the Board (*see* Appx687; Appx717-719; Appx20-21) that failed to identify statements in the prosecution history evincing a clear intent by the applicant to disclaim one of the only two embodiments of “threshold values.” *Massachusetts Inst. of Tech. v. Shire Pharms., Inc.*, 839 F.3d 1111, 1119 (Fed. Cir. 2016) (“The party seeking to invoke prosecution history disclaimer bears the burden of proving the existence of a ‘clear and unmistakable’ disclaimer that would have been evident

to one skilled in the art.”) (citing *Trivascular, Inc. v. Samuels*, 812 F.3d 1056, 1063-64 (Fed. Cir. 2016)).

LBT is also wrong on the facts. Apple is not disputing that the “battery power level monitor” in claim 8 “adjust[s]” a power level that “comprises a multitude of threshold values.” LBTBr. 31. Rather, Apple’s argument is that nothing in the patent or the prosecution history requires the “adjust[ed]” power level “compris[ing] a multitude of threshold values” to be limited to *battery* power levels. As explained above (*supra* pp. 4-9), the specification does not require the battery power level monitor to measure and adjust *only* battery power levels. Instead, the specification expressly contemplates adjusting a power level applied to location tracking circuitry using threshold values corresponding to GPS signal levels. *E.g.*, Appx51 (7:50-8:16) (“location tracking circuitry 114, may be placed in a sleep or standby mode to conserve a battery level of the battery” by “periodically check[ing] availability of GPS signal, e.g., performs a GPS signal acquisition to determine if a receive communication signal is above a first signal level”); Appx43 (Fig. 3) (the device will “[r]eactivate location tracking circuitry” if the “power level [is] greater than [the] first signal level”). Thus, there is nothing in the prosecution history, or anything else in the intrinsic record, supporting a narrow construction of “threshold values.”

CONCLUSION

For the reasons explained above and in Apple’s opening brief, the Court should reverse the Board’s decision and construe “multitude of threshold values” to include values associated with GPS signal levels—not just battery power levels. The Court should remand for the Board to consider whether Sakamoto renders the challenged claims obvious under that correct construction.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on October 3, 2024, I served a copy of the foregoing brief on all counsel of record via this Court's CM/ECF system.

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CERTIFICATE OF COMPLIANCE

1. This brief complies with the type-volume limitation of Federal Circuit Rule 32(b)(1) because it contains 5,821 words, excluding the parts of the brief exempted by Federal Circuit Rule 32(b)(2) and Rule 32(f) of the Federal Rules of Appellate Procedure.

2. This brief complies with the typeface and type-style requirements of Federal Rules of Appellate Procedure 32(a)(5) and 32(a)(6) because it has been prepared in a monospaced typeface using Microsoft Word 2019 in 14-point, Times New Roman font.

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